CONCLUSIONS: Given that ChHD affects almost one in five MCO members, its negative impact on members' QoL, work and activity impairment measures is significant and should be considered by MCOs and employers.

THE NEGATIVE IMPACT OF PSORIASIS ON WORK PRODUCTIVITY
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OBJECTIVE: Psoriasis is a common disease with profound impact on many facets of life; there is physical impairment as well as reductions in quality of life defined by psychological, social, sexual and financial parameters. Work productivity, another important component of patients’ overall well-being, has also been reported to be impacted by psoriasis. The objective of this study was to determine whether there exists a relationship between clinical severity of psoriasis and work productivity.

METHODS: To quantify the impact of psoriasis on work productivity, 90 patients were surveyed in a clinic setting. Three severity groups were created based on Psoriasis Area and Severity Index (PASI) scores: mild (<10), moderate (10–20), and severe (>20). Work impairment was measured using the Work Productivity Assessment Index (WPAI); physical and mental health statuses were assessed using the SF-8; Anxiety/Depression was assessed using the HADS; other health and employment information were also collected. RESULTS: One-third of all subjects were unemployed at the time of the study with 16.7% of these subjects reporting that they were unemployed because of their psoriasis. A greater percentage of patients in the moderate and severe groups attributed their unemployment to psoriasis (33% for each), compared with the mild group (9.5%). There was a trend toward increasing impairment while at work with increasing psoriasis severity (severe 24.4%, moderate 17.7% and mild 13.5%). With respect to the percent with activity impairment, there was a statistically significant difference between the severe group (42%) and the mild group (20.2%) [all p < 0.05]. CONCLUSIONS: Psoriasis is associated with work productivity impairment, and the degree of work impact, missed work, physical and mental health condition and anxiety/depression status tends to be greater in patients with more severe skin involvement. These findings support the need for aggressive but appropriate treatment of moderate-to-severe psoriasis.

SMOKING
DEVELOPING MARKOV-MODEL INCLUDING TOBACCO-ASSOCIATED DISEASES TO EVALUATE SMOKING CESSATION THERAPY IN JAPAN
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Up to now, there are few economic analyses which construct models taking account of tobacco-associated diseases in Japan. OBJECTIVES: To develop Markov-model, including various tobacco-associated diseases to evaluate effects of nicotine-replacement therapy (NRT) and smoking cessation guidance therapy. METHODS: To identify various tobacco-associated diseases and markov transition probabilities, we organized a committee including expert physicians. With expert interview, we developed a Markov-model. RESULTS: We identified 19 tobacco-associated diseases as major results of smoking, according to “Health Risk Appraisal”. The 19 diseases are as follows; 10 cancers—opharyngeal cancer, esophageal cancer, gastric cancer, hepatic cancer, rectal cancer, pancreatic cancer, lung cancer, cervical cancer, renal cancer and bladder cancer; 4 cardiovascular diseases—hypertensive heart disease, ischemic heart disease, aneurysm and apoplexy; and 5 other diseases—pneumonia, chronic bronchitis, asthma, gastric ulcer and cirrhosis. Tobacco is thought to increase incidence rate of those 19 diseases. We constructed four node Markov model, “Success (of smoking cessation)” “Failure” “Death” and “Sick”. “Sick” node consists of 19 diseases. We also considered a combination of major diseases. In order to avoid many branches, we settled the transition probabilities of diseases as a cumulative function of incidence of each disease. The main assumptions are as follows; 1) Only one disease occurs during each cycle; 2) The risk of each disease increases as cumulative tobacco consumption increases; and 3) Smoking affects the incidence rate of the 19 diseases but does not affect mortality rate from those diseases. One cycle in Markov chain is set to 5 year. For future cost-effectiveness analysis of smoking cessation therapy, we set cost as well as transition probability on each branch. CONCLUSIONS: We developed Markov-model, including various tobacco-associated disease. In the future, we will take cost-effectiveness analysis to evaluate smoking cessation therapy using this model.

CONFIRMATORY FACTOR ANALYSIS AND RELIABILITY OF THE “SMOKING EFFECTS INVENTORY”
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OBJECTIVES: The “Smoking Effects Inventory” (SEI) assesses the degree to which subjects experience both desirable and aversive effects from smoking. To date, no formal psychometric analyses of the SEI have been published. We therefore tested the validity and reliability of the pre-specified grouping of items on the SEI.

METHODS: Data came from three Phase II clinical trials (n = 626, n = 627, n = 312) of varenicline, developed for smoking cessation, using an adapted version of the SEI with 12 items (one item on enjoying smoking was added). Each item was scored on a seven-point scale (one “Extremely”) in response to the experience of the reinforcing effects of smoking. The pre-specified domains and single-item scales were Satisfaction (satisfaction, good taste, enjoying smoking); Psychological Reward (calming, feeling awake, reducing irritability, helping concentration, reducing hunger); Aversion (dizziness, nausea); Enjoyment of Respiratory Tract Sensations; and Craving Reduction. Confirmatory factor analyses and internal consistency reliability analyses (Cronbach’s alpha) on multi-item domains were performed at baseline in each of the three trials. RESULTS: The postulated multidimensional framework of the SEI was supported by confirmatory factor analysis in each of the three studies. Comparative fit indexes (CFI) and non-normed fit indexes (NNFI) in the three trials exceeded 0.90 (CF = 0.94, 0.95, 0.94; NNFI = 0.92, 0.93, 0.92). Cronbach’s alpha exceeded 0.80 in the three studies for the Satisfaction domain (Cronbach’s alpha: 0.82, 0.85, 0.84) and the Psychological Reward domain (0.84, 0.82, 0.83) but was less than 0.60 for the Aversion domain (0.50, 0.55, and 0.56). CONCLUSION: The validity of the postulated multidimensional framework of the SEI is confirmed and supported by the data. Although reliability (internal consistency) of the Aversion domain was not high, excellent reliability was